

abdominal segments is penetrated by the entire length of the respiratory tubes of the parasite. The tubes are white, not heavily chitinized, corresponding in color to the skin of the host; the spiracles are dark brown. The heavily chitinized circle is not visible, evidently being concealed beneath the skin of the host. The abdominal segments of the lepidopterous larva occupied by the parasite are considerably swollen, while those beyond the limits of the parasite are merely empty skin, with but few of the gills remaining. A large number of alcoholic specimens of *Elophila* larvæ were examined and dissected, but no trace of the larval parasite could be found.

It is not as yet known how the eggs of the parasite are deposited, nor, indeed, how those of *Elophila*, the host, are laid.

EXPLANATION OF PLATE XXV.

Fig. 1. Larval sheet of *Elophila fulcalis*.

Fig. 2. Pupal case of *Elophila fulcalis*.

Fig. 3. *Ginglymyia acirostris*, puparium.

Fig. 4. *Elophila fulcalis*, parasitized larva showing protruding respiratory tubes of dipterous parasite.

Fig. 5. Spiracle of puparium of *Ginglymyia acirostris*.

Fig. 6. *Elophila fulcalis*, larva.

ANOTHER NEW SPECIES OF SARCOPHAGA FROM NIAGARA FALLS.¹

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Sarcophaga yorkii new species.

Holotype (male): Collection of writer.

Paratype (male): Collection of writer.

Male.—Arista short plumose on proximal half; one or two bristles in angle formed by side of vitta and the diverging lower end of each row of frontal bristles; calypters whitish with tuft of dark hairs at the fold; leg vestiture short; posterior face of posterior femur with lower row of long bristles; submesotibial bristle absent; anterior acrostichals absent; inner presuturals

¹ Contribution from the Department of Entomology of the Montana State College, Bozeman, Montana.

present; four or more pairs of posterior dorsocentrals; vestiture of fourth ventral plate short and reclinate (not decumbent); posterior portion of fourth notum dull orange, this color extending more forward dorsally; second abdominal segment without marginals; second genital segment dull orange; in profile each forceps prong truncated at end and anterior corner pointed and slightly produced.

Length 11 mm.

HEAD.—Parafrontals, genæ and transverse impression dark, with silvery tinge when viewed from above. Breadth of front at narrowest part one third eye width; cheek height one third that of eye. Front prominent; at its narrowest part frontal vitta three to four times width of each parafrontal, its sides not parallel. Second antennal segment dark; third about twice length of second; arista short plumose on proximal half. Three rows of black cilia behind eyes, vestiture of lower portion of metacephalon black. Cheek vestiture black and coarse. Gena with irregularly placed bristles near lower orbit above transverse impression, elsewhere with short, scattered cilia. Palpi dark.

CHÆTOTAXY.—Lateral verticals absent; vibrissæ inserted very slightly above line or oral margin; each row of frontals extends to base of vitta and lower ends widely divergent with one or two bristles in angles formed by sides of vitta and diverging ends of the rows.

THORAX.—Mesonotum clothed with long slightly reclinate bristles or bristle-like hairs. Epaulets black.

WINGS.—Bend of fourth vein slightly more than a right angle; anterior cross-vein more basal than end of first longitudinal; third vein with bristles, also with scattered bristles beneath (probably variable); anterior basal cross-vein making a distinct right angle with fourth longitudinal (possibly variable); costal spine vestigial, section III of costa longer than section V; calypters whitish with tuft of dark hairs at the fold.

LEGS.—Dark, vestiture short. Anterior face of posterior femur with three rows of bristles, upper and lower rows complete, bristles of intermediate row short and only present centrally; posterior face with complete lower rows of long bristles; femur subcylindrical; tibia very slightly curved or straight; tarsus not shorter than tibia. Anterior and posterior ventral rows of bristles of middle femur present, latter on distal two thirds, former complete; submesotibial bristle absent.

CHÆTOTAXY.—Anterior dorsocentrals scarcely weaker than anterior pairs of postsaturals, much longer than vestiture of prescutum; acrostichals absent; inner presaturals present: four or more pairs of posterior dorsocentrals, last two much the stronger; prescutellar acrostichals present: scutellar apicals present: three sternopleurals; lower sternopleura with bristles and hairs.

ABDOMEN.—Clothed above with short reclinate bristles, beneath with much longer, almost erect hairs. Vestiture of fourth ventral plate short and reclinate with longer, appressed marginal hairs. Posterior portion of fourth notum dull orange, this color extending farthest forward dorsally.

CHÆTOTAXY.—Second segment without dorsal marginal bristles; third with

complete row or with the two dorsal bristles somewhat separated from the laterals; fourth with marginal row well anterior to posterior margin and the dorsal, central bristles still farther forward.

GENITAL SEGMENTS.—Both dull orange or first somewhat brownish: first with long, hairy vestiture posteriorly, marginal bristles absent; second polished, vestiture about length of that on first, anal area small. Forceps darker than second segment, with short upward flap-like prolongations; prongs in profile



truncated at ends and anterior corners pointed and slightly produced; vestiture short except on flap-like prolongations. The figure shows the details of the genital segments (f. = forceps, a. c. = anterior clasper, p. c. = posterior clasper, a. p. = accessory plate, g. s. 2 = second genital segment). Genitalia distinctive.

The holotype and the single paratype were both taken at Niagara Falls, New York, on June 25, but the year and the collector are not recorded.

NEW NEOTROPICAL MEMBRACIDÆ.¹

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Membracis humilis Fowler, variety *aurora* new var.

This variety answers the description of *M. humilis* Fowler in every particular except that the pronotal markings are brilliant orange in color instead of white. A series of thirty-nine specimens is shown in my collection, eighteen males and eighteen females from Chosica, Peru, and three females from Ecuador. Attempts have been made to change the color of these specimens by various bleaching processes in the thought that the single specimen which Fowler described might have been faded but the color appears permanent. Since both sexes are represented and the series is a fairly long one and represents two localities, I believe this to be a constant color-variety of *humilis*.

The females are slightly larger than the males and both sexes are uniformly black in body color with the markings bright orange. The eyes are

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